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10/043,170	01/14/2002	Toshikazu Kitamura	Q68031	5027

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EXAMINER	
LE, DIEU MINH T	

ART UNIT	PAPER NUMBER
2114	4

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/043,170	KITAMURA, TOSHIKAZU	
	Examiner	Art Unit	
	Dieu-Minh Le	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Part III DETAILED ACTION

Specification

1. Claims 1-17 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted Prior Arts, Fig. 5A, (hereafter referred to as Prior Arts) in view of Barker et al. (US Patent 5,931,916 hereafter referred to as Barker.)

As per claim 1:

Prior Arts substantially teaches the invention. Prior Arts explicitly teaches:

- A life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer, [fig. 5, Description, pg. 1, lines 18 through pg. 2, line 9] comprising of:
- transmitting a life-and-death monitoring packet [fig. 5, Description, pg. 2, lines 5-6];
- receiving a response returned from the life-and-death monitoring [fig. 5, Description, pg. 2, lines 7-9];
- checking host computer's life-and-death state [fig. 5, Description, pg. 2, lines 23-26].

Prior Arts does not explicitly teach:

- a table having a management order of a host computer to be managed;
- checking flag of table;
- transmitting life-and-death monitoring packet to a subsequent host computer.

However, Prior Art did disclose:

- a management host computer A and to-be-managed host computers B, C, and D connected through a network 100 [fig. 5, Description, pg. 2, lines 1-4];

- transmission and response between the management host computer A and the host computers B, C, and D to be managed is conducted smoothly [fig. 5, Description, pg. 2, lines 1-4].

Barker explicitly teaches:

- A multi-processor environment including a plurality of node interconnected by a number of networks each run a number of users processes and message transferred by the processes are transmitted ***sequentially*** from a transmitting node to a receiving node [abstract, col. 14, lines 10-26] and ***monitoring returning data for packet acknowledgement*** [col. 2, lines 1-4];

comprising:

- host identity address list comprising a plurality of corresponding network node address [col. 1, lines 61-62];

- set sequence flag used for initialization of transferring [col. 5, lines 6-8, col. 6, lines 6-9, and col. 8, lines 5-17];

- transmitting sequentially from a transmitting node to a receiving node [abstract];

- the next address cyclically in the address list to the last address used for transmission between nodes [col. 1, lines 65-67].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the host identity address list (i.e., a table having a management order of a host computer to be managed), a set of sequence flag (i.e., checking flag of table), and sequentially nodes transmission (i.e., transmitting life-and-death monitoring packet to a subsequent host computer) as taught by Barker in conjunction with the life-and-death monitoring method as disclosed by the Prior Arts and the and Description Of The Related Art in order to enhance the computer networking performance. More specifically, the computer network management system can easily identify any computer host within a plurality of computer hosts connected via a network whether it operates correctly and efficiently in a life-and-death situation. One of ordinary skill in the art would have been motivated to do so to improve the entire network throughput (i.e., bandwidth management) so that data can transmit and receive in a very high

reliability, availability, and free of errors. It would further obvious because by applying a network management capability within a plurality of computers, computer hosts can be thoroughly managed in configuration management, security management, accounting management, data management, etc...

As per claims 2-3:

Prior Arts substantially teaches the invention. Prior Arts explicitly teaches:

- A life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer, [fig. 5, Description, pg. 1, lines 18 through pg. 2, line 9] comprising of:
- transmitting a life-and-death monitoring packet [fig. 5, Description, pg. 2, lines 5-6];
- receiving a response returned from the life-and-death monitoring [fig. 5, Description, pg. 2, lines 7-9];
- checking host computer's life-and-death state [fig. 5, Description, pg. 2, lines 23-26].

Prior Arts does not explicitly teach:

- host computer or host computers to be managed which are recognized as incommunicable, life-and-death packet is transmitted to further subsequently in the order.

Barker further explicitly teaches:

- host computer transmission between uses the next available address the address list unless that address has been marked as out of service [col. 4, lines 33-39].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the address list for monitor packet forwarding and transmitting to the next computer host due to an advance knowledge of computer host unavailable or incommunicable as taught by Barker in conjunction with the life-and-death monitoring method as disclosed by the Prior Arts and the and Description Of The Related Art in order to expedite and network transmission from node to node. That is by acknowledging the outage or not-in-service or incommunicable of any host computer ahead of time the data monitoring process can perform uninterruptedly. In addition, the network management can minimize the delay time and response time of informing the management host computer in life-and-death situation. One of

ordinary skill in the art would have been motivated to do so to enhance the entire network throughput (i.e., bandwidth management) so that data can transmit and receive in a very high reliability, availability, and free of errors.

As per claim 4:

Prior Arts substantially teaches the invention. Prior Arts explicitly teaches:

- A life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer, [fig. 5, Description, pg. 1, lines 18 through pg. 2, line 9] comprising of:
- transmitting a life-and-death monitoring packet [fig. 5, Description, pg. 2, lines 5-6];
- receiving a response returned from the life-and-death monitoring [fig. 5, Description, pg. 2, lines 7-9];
- checking host computer's life-and-death state [fig. 5, Description, pg. 2, lines 23-26].

Prior Arts does not explicitly teach:

- life-and-death monitoring packet which has been transmitted in management order is lastly transmitted to management host computer.

Barker further explicitly teaches:

- monitoring return data for packet acknowledgement [fig. 8, col. 5, lines 57-64, col. 9, lines 55 through col. 10, line 2 and col. 14, line 23-24].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the **monitoring return data for packet acknowledgement** as taught by Barker in conjunction with the life-and-death monitoring method as disclosed by the Prior Arts and the and Description Of The Related Art in order to ensure very host computer checked for lift-and-death situation. That is by completing monitoring and checking all host computers connected via the network, the network management system or management host computer can manage every host computer successfully in providing data transmission to and form devices.
One of ordinary skill in the art would have been motivated to do so to enhance host computer connectivity environment. That is to

eliminate time delay and increase data response among all host computers.

As per claims 5 and 6:

Prior Arts substantially teaches the invention. Prior Arts explicitly teaches:

- A life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer, [fig. 5, Description, pg. 1, lines 18 through pg. 2, line 9] comprising of:
- transmitting a life-and-death monitoring packet [fig. 5, Description, pg. 2, lines 5-6];
- receiving a response returned from the life-and-death monitoring [fig. 5, Description, pg. 2, lines 7-9];
- checking host computer's life-and-death state [fig. 5, Description, pg. 2, lines 23-26].

Prior Arts does not explicitly teach:

- management host computer having received life-and-death monitoring packet including table targeted at host computer to be managed whose check flag of table is not check and

transmits packet to host computer to be managed whose flag is not checked.

- a new life-and-death monitoring packet generated by changing the management order of table.

Barker further explicitly teaches:

- monitoring return data for packet acknowledgement [fig. 8, col. 5, lines 57-64, col. 9, lines 55 through col. 10, line 2 and col. 14, line 23-24] and the sequence flag set [col. 5, lines 6-9];

- new sequence number carried out between two host computer to establishing communication route [col. 6, lines 6-9].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to apply the **monitoring return data for packet acknowledgement and new sequence number and route between host computers** as taught by Barker in conjunction with the life-and-death monitoring method as disclosed by the Prior Arts and the and Description Of The Related Art in order to ensure very host computer checked for lift-and-death situation. That is by completing monitoring and checking all host computers connected via the network, the network management system or management

host computer can manage every host computer successfully in providing data transmission to and form devices. One of ordinary skill in the art would have been motivated to do so to enhance host computer connectivity environment. That is to eliminate time delay and increase data response among all host computers.

As per claims 7-12:

Due to the similarity of claims 7-12 to claims 1-6 except for a life-and-death monitoring system at a plurality of host computers connected to a common network instead of a life-and-death monitoring method at a plurality of host computers connected to a common network; therefore, these claims are also rejected under the same rationale applied against claims 1-6. **In addition, all of the limitations have been noted in the rejection as per claims 1-6.**

As per claims 13-17:

These claims are the same as per claims 1-6. The only minor different is that these claims are directed to a life-and-death monitoring ***computer program*** for use in monitoring a plurality of host computers connected to a common network instead of the a life-and-death monitoring method at a plurality of host computers connected to a common network described in claims 1-6.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realize that a computer program is a necessary item for such managing the capabilities of checking, monitoring, receiving, transmitting system, etc…. Since these functions obviously need a means for instruction or code means resided within the computer program for performing those computer operations including the failure detection and correction (e.g., computer host life-or-death communication among plurality of computer devices via a network). Therefore, these claims are also rejected under the same rationale applied against claims 1-6.

4. Claims 1-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted Prior Arts, Fig. 5A (hereafter referred to as Prior Arts) in view of Kanamaru et al. (U.S. Patent 6,574,197 hereafter referred to as Kanamaru.) Prior Arts substantially teaches the invention. Prior Arts explicitly teaches:

- A life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer, [fig. 5, Description, pg. 1, lines 18 through pg. 2, line 9] comprising of:

- transmitting a life-and-death monitoring packet [fig. 5, Description, pg. 2, lines 5-6];

- receiving a response returned from the life-and-death monitoring [fig. 5, Description, pg. 2, lines 7-9];

- checking host computer's life-and-death state [fig. 5, Description, pg. 2, lines 23-26].

Prior Arts does not explicitly teach:

- a table having a management order of a host computer to be managed;

- checking flag of table;

- transmitting life-and-death monitoring packet to a subsequent host computer.

However, Prior Art did disclose:

- a management host computer A and to-be-managed host computers B, C, and D connected through a network 100 [fig. 5, Description, pg. 2, lines 1-4];

- transmission and response between the management host computer A and the host computers B, C, and D to be managed is conducted smoothly [fig. 5, Description, pg. 2, lines 1-4].

Kanamaru et al. explicitly teaches a network monitoring device comprising plurality of computer nodes communicated via a monitoring packet sequentially (i.e., neighboring node upstream or downstream). Kanamaru further explicitly teaches:

- a network status table [col. 4, line 63];
- a status management [col. 5, lines 1-17];
- computer nodes communicated and monitored in sequentially (i.e., neighboring node upstream or downstream) [col. 2, lines 39-55];
- monitoring packet receiving and sending [col. 4, lines 65 through col., 5, lines 5];
- notifying the occurrence of event by status management unit [col. 25, lines 41-44];
- new neighboring node sequencing path [col. 26, lines 37-44];
- updating table with latest event occurred in nodes [col. 3, lines 49-55];
- determining computer node broken or out-of-service [col. 2, lines 51-53].

Therefore, it would have been obvious to realize the combination of Kanamaru's network monitoring device comprising plurality of computer nodes communicated via a monitoring packet

sequentially and Prior Arts' life-and-death monitoring method of monitoring by any of a plurality of host computers connected to a common network, a life-and-death state of other host computer do clearly teach the network monitoring system in life-and-death situation. The combination does deal with network computer communicated in sequentially via monitoring packet for every host computer status. By utilizing this combined approach, host computers can enhance its data performance on the network as well as its data availability among data processes.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can

be reached on (703)305-9713. The fax phone number for this Group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114

DML
5/7/04